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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,577	08/27/2001	Nobuyuki Goto	0102/0177	2735

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EXAMINER

TOPGYAL, GELEK W

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/938,577	GOTO ET AL.	
	Examiner	Art Unit	
	Gelek Topgyal	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5,8,11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5,8,11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7 July 2002 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claim 3** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. **Claim 3** recites the limitation "the specific time points" in the last paragraph of claim 3. There is insufficient antecedent basis for this limitation in the claim.

Response to Arguments

5. Applicant's arguments with respect to claims 3-5 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 3-5 and 8** are rejected under 35 U.S.C. 102(e) as being anticipated by Vallone et al. (US 6,847,778).

Regarding claim 3, Vallone et al. teaches a program-signal recording and reproducing apparatus for recording a program signal on a recording medium, and reproducing an already-recorded portion of the program signal which is being recorded on the recording medium, the apparatus comprising:

- time information generating means for generating time information in accordance with lapse of time (Vallone teaches in col. 22, lines 20-33 that the display information includes the means for generation of time);
- recording means for recording the time information generated by the time information generating means or time information indicating time at which the program signal is broadcasted on the recording medium together with the program signal (Vallone teaches in col. 21, lines 29-32 that the program guide information, which includes the broadcast time (start and stop time) and the current time, is recorded onto the same medium as that of the program signal);

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- a head retrieval command input means for sequentially performing a program head retrieval ~~command~~ commands (Vallone teaches in col. 19, lines 23-33 a jump button 1414 and a replay button 1415 on the remote control that allows for program retrieval. The user can choose to operate the buttons multiple times, which jumps backwards or forward accordingly); and
- and first head retrieval reproduction means for, when each of the program head retrieval ~~command~~ commands is performed by the head retrieval command input means, obtaining present time information generated by the time information generating means (Vallone teaches col. 22, lines 20-33 that the display information includes the means for generation of time) and performing head retrieval reproduction of the program signal recorded at one of ~~(1) time of 00-minute or in an hour and (2) time of 30 minute in an hour which is~~ specific points which are previous to the present time represented by the obtained present time information, and which ~~is closer to the present time than the other is~~ are after a beginning of the recording of the program signal on the recording medium and in a duration of the recorded program signal; (Col. 19, lines 23-33, teaches a replay button 1415 that allows the user to jump back in time to play a section previous to the current time while in the current program is being recorded.)
- wherein the specified time points are sequentially selected by the first head retrieval reproduction means in response to the program head retrieval commands in an order such that first selected one of the specified time points is closer to the present time than others of the specified time points are (As recited

above, the replay button 1415 allows the user to jump back in time to play sections previous to the current time while the current program is being recorded (col. 19, lines 22-33). It should be understood that the user can choose to press the replay button 1415 more than once; therefore the previous time points are selected in a sequential manner. When the user presses the replay button 1415 for a first time, the playback point "repositions ten seconds (the time span is system adjustable) backwards into the cache bar 2602", therefore, the specified point is closest to the current time; e.g. ten seconds from the current time. When the user operates the replay button 1415 twice within a short period, the playback point should reposition to *twice* the time span as set in the system, i.e. twenty seconds. The specified point now is twenty seconds from the current time. Therefore, the limitation of sequentially selecting specified time points closer to the present time is met).

Regarding claim 4, Vallone teaches a program-signal recording and reproducing apparatus as recited in claim 3, further comprising:

- a cache playback mode in which a program signal temporally continuous from past to now is always recorded on a recording medium while a prescribed amount is a limit, and an already-recorded portion of the program signal which is being recorded is reproduced (Vallone teaches in col. 19, lines 27-32 that when a user is watching live TV, the option to play a buffered/cached portion is available in the same manner as an instant replay operation in sports. The instant replay is a cache playback equivalent);

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- a time shift playback mode in which, with respect to a program signal recorded on the recording medium on the basis of a record start timing decided by operation by a user (Vallone teaches in col. 17, lines 16-25 that the user can instruct the system to record a particular program he or she is watching.

Recording of a program can also be recorded by way of scheduling as described in col. 23, lines 10-18), and an already-recorded portion of the program signal which is being recorded is reproduced (Vallone teaches in col. 15, lines 14-18 that a show either recorded (Fig. 17, elements 1702-1704 represent recorded shows) or currently recording (Fig. 17, element 1713 represents a program that is currently recording), can be viewed immediately by selecting the play button (Fig. 18, element 1801));

- and second head retrieval reproduction means for, when the program head retrieval command is performed by the head retrieval command input means, performing head retrieval reproduction of the program signal from the record start timing (Vallone teaches that by selecting the play button (Fig. 18, element 1801), the recorded program begins playback from the head/beginning of the program);

wherein the head retrieval reproduction is performed by the first head retrieval reproduction means in the cache playback mode (as described above in claim 3 rejection), and the head retrieval reproduction is performed by the second head retrieval reproduction means in the time shift playback mode (as described above in claim 4).

Regarding claim 5, Vallone teaches a program-signal recording and reproducing apparatus comprising:

- first means for recording a program signal on a recording medium (Vallone teaches in col. 4, lines 38-40, that the program is recorded on a medium);
- second means for generating first time information representing the present time (Vallone teaches in col. 22, lines 20-33 of display information which includes the means for generation of present time);
- third means for generating second time information representing one of (1) a time at which the program signal was recorded by the first means (Vallone teaches in col. 12, lines 36-40, that when recording a particular program, information about when it was recorded can be recorded onto a medium) and (2) a time at which the program signal was broadcasted (In col. 21, lines 29-32, Vallone describes that the program guide information, which includes the broadcast time (start and stop time), is recorded onto a medium, the same medium where the program is stored. Col. 22, lines 20-33 describes that the program guide information is read from the medium and used to generate the broadcast time);
- fourth means for determining a specified time ~~point~~ points which ~~precedes~~ precede the present time represented by the first time information generated by the second means, and which are after a beginning of the recording of the program signal on the recording medium and in a duration of the recorded program signal (Vallone teaches in col. 19, lines 23-33 a jump button 1414 and a replay button 1415 on the remote control that allows for program retrieval. The

user can choose to operate the buttons multiple times, which jumps backwards or forward accordingly. The function of the replay button 1415 can take place while the current program is being recorded);

- and fifth means for finding a segment of the program signal on the recording medium according to each of the specified time point points determined by the fourth means and the second time information generated by the third means, the program-signal segment relating to the second time information corresponding to the specified time point, and for reproducing the found segment and subsequent segments of the program signal from the recording medium (Vallone teaches in col. 19, lines 23-33 of a replay button 1415 that allows the user to jump back in time to play a section and the subsequent segments previous to the current time. It should be noted that the user can press the replay button 1415 more than once to sequentially jump back to playback points in increments of an adjustable time span).
- wherein the ~~specific time point corresponding to one of (1) time whose minute part is 00 and (2) time whose minute part is 30 which is closer to the present time than the other is~~ specified time points are sequentially selected by the fifth means in an order such that first selected one of the specified time points is closer to the present time than others of the specified time points are (As recited above, the replay button 1415 allows the user to jump back in time to play sections previous to the current time while the current program is being recorded (col. 19, lines 22-33). It should be understood that the user can choose to press the replay button

1415 more than once; therefore the previous time points are selected in a sequential manner. When the user presses the replay button 1415 for a first time, the playback point “repositions ten seconds (the time span is system adjustable) backwards into the cache bar 2602”, therefore, the specified point is closest to the current time; e.g. ten seconds from the current time. When the user operates the replay button 1415 twice within a short period, the playback point should reposition to *twice* the time span as set in the system, i.e. twenty seconds. The specified point now is twenty seconds from the current time. Therefore, the limitation of sequentially selecting specified time points closer to the present time is met).

Regarding claim 8, Vallone teaches a program-signal recording and reproducing apparatus comprising:

- first means for recording a first program signal on a recording medium while leaving only a latest temporally-continuous portion of the first program signal in the recording medium as a cached portion (Vallone teaches in col. 5 lines 26-40 of four DMA engines that have circular storage buffers which stores only a finite amount of video and data);
- second means for generating first time information representing the present time (In col. 22, lines 20-33, Vallone describes display information which includes the means for generation of present time);
- third means for generating second time information representing one of (1) a time at which the first program signal was recorded by the first means and (2) a time

at which the first program signal was broadcasted (In col. 21, lines 29-32, Vallone describes that the program guide information, which includes the broadcast time (start and stop time), is recorded onto a medium, the same medium where the program is stored. Col. 22, lines 20-33 describes that the program guide information is read from the medium and used to generate the broadcast time);

- fourth means for determining a specified time ~~point~~ points which ~~precedes~~ precede the present time represented by the first time information generated by the second means, and which are after a beginning of the recording of the first program signal on the recording medium and in a duration of the recorded first program signal (Vallone teaches in col. 19, lines 23-33 a jump button 1414 and a replay button 1415 on the remote control that allows for program retrieval for bookmarked frames and already recorded frames, respectively, which are points in time prior to the current time. The user can choose to operate the buttons multiple times, which jumps backward or forward accordingly. The function of the replay button 1415 can take place while the current program is being recorded);
- fifth means for sequentially accepting a head-retrieval ~~command~~ commands (Vallone teaches in Fig. 14 of a replay button 1415 on the remote control 1401 that a user can press multiple times. When the buttons are pressed the commands to jump back to another specified time point is sequentially processed).
- sixth means responsive to each of the head-retrieval ~~command~~ commands accepted by the fifth means for finding a segment of the latest temporally-

continuous portion of the first program signal on the recording medium according to one of the specified time ~~point~~ points determined by the fourth means and the second time information generated by the third means, the program-signal segment relating to the second time information corresponding to the one of the specified time ~~point~~ points, and for reproducing the found segment and subsequent segments of the first program signal from the recording medium during a cache playback mode of operation (Vallone teaches in col. 19, lines 27-32 that when a user is watching live TV, the option to play a buffered/cached portion is available in the same manner as an instant replay operation in sports. The replay button 1415 displays the segment and its subsequent segments from a previous time point. When the buttons are pressed multiple times, the previous points are sequentially processed and therefore time points previous to the current time can be sequentially rendered);

- seventh means for recording a second program signal on the recording medium in response to a designated record start timing (Vallone teaches in col. 20 lines 23-31 that multiple tuners incorporated into the system will allow for recording of multiple programs); and
- eighth means responsive to each of the head-retrieval ~~command~~ commands accepted by the fifth means for reproducing the second program signal from the recording medium during a time shift playback mode of operation (Vallone teaches in col. 19, lines 27-32 that when a user is watching live TV, the option to play a buffered/cached portion is available in the same manner as an instant

replay operation in sports. The replay button 1415 displays the segment and its subsequent segments from a previous time point. The number of tuners dictate the number of programs that can be simultaneously recorded, and therefore, in the case of a two tuner system, the user could switch between two separate programs that are simultaneously recorded and therefore apply the replay button 1415 to either currently recording programs).

- wherein the ~~specific time point corresponding to one of (1) time whose minute part is 00 and (2) time whose minute part is 30 which is closer to the present time than the other is~~ specified time points are sequentially selected by the sixth means in an order such that the first selected one of the specified time points is closer to the present time than others of the specified time points are (As recited above, the replay button 1415 allows the user to jump back in time to play sections previous to the current time while the current program is being recorded (col. 19, lines 22-33). It should be understood that the user can choose to press the replay button 1415 more than once; therefore the previous time points are selected in a sequential manner. When the user presses the replay button 1415 for a first time, the playback point "repositions ten seconds (the time span is system adjustable) backwards into the cache bar 2602", therefore, the specified point is closest to the current time; e.g. ten seconds from the current time. When the user operates the replay button 1415 twice within a short period, the playback point should reposition to *twice* the time span as set in the system, i.e. twenty seconds. The specified point now is twenty seconds from the current time.

Therefore, the limitation of sequentially selecting specified time points closer to the present time is met).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Vallone et al. (US 6,847,778) in view of Tsumagari et al. (US 6,360,057).

Regarding claim 11, Vallone et al. teaches all the limitations as recited in claim 3 above, but fails to particularly teach wherein each of the specified time points has a minute part of (1) 00 and (2) 30.

In an analogous art, Tsumagari teaches in col. 29, line 49 through col. 29, line 47 of a system that is capable of recording entry points according to a user selectable interval. Therefore, a user can set a time interval of "an"= 30 minutes, which thereby records entry points every thirty minutes. Therefore a program recording starts at the 00th minute, and every successive 30th minute during the recording process is tagged with an entry point. Tsumagari teaches in col. 31, lines 34-59 of the ability for the user to select a created entry point, i.e. every thirty minutes, and therefore the video from the selected entry point is played back.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the ability to jump back to play a previous portion of a recorded program at entry points that have been created every thirty minutes as taught by Tsumagari et al. into the system of Vallone et al. because it allows the user the ability to reproduce recorded portions of a video program at any desired location.

10. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Vallone et al. (US 6,847,778) in view of Geer et al. (US 6,778,882).

Regarding claim 12, Vallone et al. teaches all the limitations as recited in claim 3 above, but fails to particularly teach wherein the first head retrieval reproduction means comprises means for performing head retrieval reproduction of the program signal from the beginning of the recording of the program signal when none of the specified time points are usable as effective ones.

In an analogous art, Geer et al. teaches a simultaneous recording and playback apparatus that during automatic recording of selected channels, a user has the option to start viewing the program at the beginning of the program before the recording has completed by using buttons 1430 and 1450 to select a desired program and then pressing button 1410 to commence the reproduction. (Fig. 9, Fig. 14, elements 1420, 1430, 1450, and col. 8, line 1 – col. 9, line 43)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the start of program retrieval as taught by Geer into

Vallone's recording apparatus because it allows a user an easy and convenient way to reproduce recorded portions of a video program at any desired location.

Conclusion

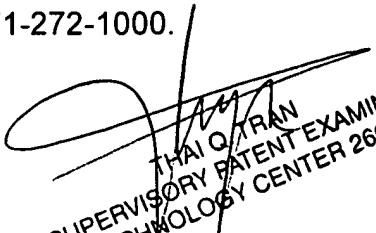
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited reference teaches a system that allows sequential reproduction using indexed points within a video program.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gelek Topgyal whose telephone number is 571-272-8891. The examiner can normally be reached on 8:30am -5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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